



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 29 1993

MEMORANDUM

SUBJECT: Section 18 for Difenconazole on wheat seed  
in Idaho

FROM: Anthony F. Maciorowski, Chief,  
Ecological Effects Branch  
Environmental Fate and Effects Division H7507C

TO: Rebecca Cool, PM 41  
Special Review and Reregistration Division (H7505W)

Introduction

The State of Idaho requests a Section 18 Emergency Registration for the use of Dividend 3FS (active ingredient, difenoconazole) on wheat seed to control a fungus smut, Tilletia controversa. A maximum of 18 million pounds of this treated wheat seed are to be sowed in the ten most northern counties of Idaho which are Boundary, Benewah, Bonner, Clearwater, Idaho, Kootenai, Latah, Lewis, Nez Perce and Shoshone. The seed will be planted during October and November of 1993.

In his letter of 23 August 1993, Rodney Awe, Administrator of the Idaho Department of Agriculture, states that a maximum of 18 million pounds of wheat seed will be treated. A 9 August 1993 letter to Rebecca Cool from Acting Director Lane Jolliffe states that the 18 million pounds of seed would be treated with 4,218 pounds of difenoconazole active ingredient.

Discussion

To derive the expected residue on the wheat seed, we divide the pounds of active ingredient by the pounds of seed:

$$4,218 \text{ lbs a.i.} / 18,000,000 \text{ lbs of seed} = \text{ap } 230 \text{ ppm}$$

Toxicity data have been provided by Ciba-Geigy Corporation (U.S.EPA Accession 422451-02). They have not been thru our standard quality assurance evaluation but they are the only toxicity data available to us at this time. The lowest LC50 listed was 4,760 ppm for bobwhite quail. Eggshell thickening in Bobwhite quail was found at



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25 ppm, but that effect did not necessarily cause reproductive impairment. Ciba Geigy Corporation indicates that, in chronic tests at 625 ppm, the bobwhite showed "significant reductions in numbers of eggs laid and viable embryos." The 625 ppm is not far from the 320 ppm expected on the seed. However, a chronic avian exposure to difenaconazole would not be expected, because, once the wheat seed germination has occurred, the concentrated pesticide would be dispersed either to the wheat seedling or to the soil. Dr. Blair Goates (1-208-397-4181) with the USDA in Aberdeen Idaho notes that germination of the wheat should occur within about two weeks of sowing.

No deaths occurred among rats exposed to 10,000 ppm for 28 days so concern for foraging mice and other small mammals is diminished.

According to the U.S. EPA County Listing of Endangered Species there are no Endangered Species at risk in the ten Idaho counties. The list was checked October 1992 by the U.S. Fish and Wildlife Service.

#### Conclusions

Our best estimate is that unreasonable hazard to endangered and nonendangered fish and wildlife in the ten Idaho counties is unlikely. This decision is based on data supplied by the registrant without a quality assurance review by the Agency. No other data are available. Highly reliable data are also unavailable in regard to environmental chemistry. This lack of data poses additional risk in the event of a chemical spill or other such mishap.

DP Barcode : D194787  
 PC Code No : 284887  
 EEB Out : SEP 29 1993

To: Rebecca Cool, PM 41  
 Product Manager  
 Registration Division H7505C

From: Anthony F. Maciorowski, Chief  
 Ecological Effects Branch/EFED (H7507C)

Attached, please find the EEB review of...

Reg./File # : \_\_\_\_\_  
 Chemical Name : Difenconazole  
 Type Product : Fungicide  
 Product Name : Dividend 3FS  
 Company Name : Ciba Geigy  
 Purpose : Emergency use on wheat seed in Idaho

Action Code : 500 Date Due : 5 October 1993  
 Reviewer : R. Hitch Date In EEB: 7 September 1993

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1(A)			72-2(A)			72-7(A)		
71-1(B)			72-2(B)			72-7(B)		
71-2(A)			72-3(A)			122-1(A)		
71-2(B)			72-3(B)			122-1(B)		
71-3			72-3(C)			122-2		
71-4(A)			72-3(D)			123-1(A)		
71-4(B)			72-3(E)			123-1(B)		
71-5(A)			72-3(F)			123-2		
71-5(B)			72-4(A)			124-1		
72-1(A)			72-4(B)			124-2		
72-1(B)			72-5			141-1		
72-1(C)			72-6			141-2		
72-1(D)						141-5		

Y=Acceptable (Study satisfied Guideline)/Concur  
 P=Partial (Study partially fulfilled Guideline but additional information is needed)  
 S=Supplemental (Study provided useful information but Guideline was not satisfied)  
 N=Unacceptable (Study was rejected)/Nonconcur



# STATE OF IDAHO

## DEPARTMENT OF AGRICULTURE

CECIL D. ANDRUS  
Governor  
W. G. NELSON  
Director

August 23, 1993

Rebecca Cool  
Section Head H7505C  
Emergency Response Section  
Room 52, 6th Floor  
US EPA  
2800 Jefferson Davis Highway  
Arlington VA 22202

*Libby*

RE: Emergency use of Dividend seed treatment on wheat to control Dwarf Bunt in Idaho

Dear Ms. Cool:

It has recently been brought to our attention that the Section 18 request for Dividend seed treatment on wheat, submitted to your agency on August 9, 1993, contained an error in the estimated pounds of seed to be treated. Item #7 should read, "This request would allow a single application of Dividend 3FS to a maximum of 18 million pounds of winter wheat seed to be planted in the 10 northern counties of Idaho, including - Boundary, Benewah, Bonner, Clearwater, Idaho, Kootenai, Latah, Lewis, Nez Perce and Shoshone."

Thank you for your prompt attention to this request. If you have any questions or need any additional information, please feel free to contact Ronda Hirnyck at 208-334-3550.

Sincerely,

*Rodney Awe*

Rodney A. Awe  
Administrator

pm/ct

pc: Dr. Gene Carpenter, U of I  
Dr. Robert Forster, U of I  
Dr. Blair Goates, USDA-ARS  
Susan Burch, US Fish & Wildlife  
Jon Heller, US EPA, Region 10  
Jerry Harrison, Ciba-Geigy  
John Gibson, Ciba-Geigy  
Steve Johnson, Idaho Grain Producers Assn.  
Ted Maxwell, Washington Dept. of Agriculture  
Bob Mitchell, Oregon Dept. of Agriculture